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It is not the aim of the AGRICULTURAL STUDENT merely to present to its readers the class of matter furnished by the general college newspaper. The STUDENT stands almost alone in representing a class of journalism which has not been long established—the technical college paper. It is our aim to bring before our readers the vital facts concerning the Ohio State University, and especially the College of Agriculture and Domestic Science, to give an idea of the work carried on in this department, to present original articles by the students and professors, and to report the results of experiments made by this department and by the Students' Experiment Union.

Again, it is our intention not to try to rival any of the general agricultural papers, or even copy after them in any way, but to retain what we have—a form and aim distinctly our own, something peculiar to ourselves.

Agricultural and horticultural courses of study in institutions of higher learning, have from the first been characteristic of the state universities of America.

In truth the so-called state universities are the outgrowths of state institutions generally known, in former years, as agricultural and mechanical colleges. The agricultural and mechanical colleges are known by some as the "land grant" colleges, the name referring to the mode of their foundation through the agency of the Morrel law. This law provided that a tract of land should be laid off in each state of the Union and used in the most reasonable manner to aid the support of a college whose chief duty should be to give instruction relating to agriculture and the mechanic arts.

Thus agriculture and its allied studies, among the chief of which stands horticulture, zoology, chemistry and botany, are, as they should be, characteristic of the State University. In many state universities of good standing fellowships in agriculture and horticulture are offered. The object of these is to allow those who care, as well as those whose work in college shows that they deserve, to follow up more fully their studies and researches along these lines.

The time has come when a student does not do right, and does not do justice to himself and to his course, to specialize before graduation. But he must come up to the standard in all subjects if he expects to receive his degree. This being the case, it is through the fellowship alone that he is able to pursue his special studies as he may wish.

The State University of Ohio is not entirely devoid of fellowships, but many of the most prominent departments seem not to have paid the proper amount or attention to the subject. We do not mean this as a criticism, but merely to call the attention of the professors and students to the subject.

Mr. Chas. W. Burkett, assistant in Agriculture, lectures before the farmers of Tarlton, O., in September, at their annual picnic. Mr. Burkett lectured at this same place last winter and seems to have made a very good impression.

Time is measured by epochs, not years. When the people of a community or region are called upon to give the date at which anything happened they will invariably refer it to the time when something of note happened, unless the subject in question, marked in itself an epoch in their history. Then, after the time, according to epoch, is decided upon, it will be reduced to years. Thus we see that years make epochs and epochs history.

This fall will mark an epoch in the history of the School of Agriculture, as well as the entire University.

In the first place, the school has been well advertised during the past year, and the increased size of the number of students in the School of Agriculture will, doubtless, be readily seen.

In the second place, the School of Agriculture is under a different system, and a different name. Instead of the "School of Agriculture," it is now more properly termed the College of Agriculture and Domestic Science, and is under the control of a dean and secretary, instead of being directly under the control of the President of the University as before.

In the third place, there is to be begun (upon our campus), during September, the finest building devoted to agricultural education that this country has ever seen. This building in itself is to be an object lesson in architecture and mechanic art. It is to contain every modern convenience, and is to be an improvement over every other such building known. Not only this, but having these added facilities for work, what cannot the future look for from workers in this department? But, at this time we must not say too much of what shall be, but we shall wait until the curtain is drawn and then we shall have before us something worthy of our praise.

The authorities of Cornell have abolished all degrees except the degree of Bachelor of Arts. Many will be surprised at learning this. At first thought it seems to be a queer thing for a uni-

versity like Cornell to do. But the Cornell people say that the purpose of a degree is merely to show that the person bearing it has completed a college course. In fact a degree itself does not amount to so much after all. Any college can confer a degree. It is the reputation of the institution conferring it, and the character of the man (or woman) bearing it that makes the value of a degree. So the significance of the action of the Cornell authorities is not so great after all.

The final plans for Townshend Memorial Hall have been submitted, and the bids for the work were let on September 1. The architects are under obligations to have the building ready for use by March, 1897.

We can barely appreciate, as yet, the great stride we are making in getting this magnificent building for the use of the Department of Agriculture. It is here that the College of Agriculture and Domestic Science proper will have its future home.

And one of the most agreeable outlooks for the editor of the STUDENT is the fact that there is to be a fine large room supplied in the new building for the exclusive use of the Student Board. This room is in connection with the Townshend Society Hall, the student's meeting room. In this room the editor will have his headquarters, the exchanges will be kept, and everything in connection with the paper will be found here. This will be our home.

College athletics is to the student body almost what food is to the organism—it keeps it alive; and college affairs would be alarmingly dull and uninteresting for the greater part of the year were it not for the life which is infused into them through the agency of athletic contests of various kinds. The athletics of a college or university go a great way in broadening and spreading its good name—if the athletics are of the right kind. The college with the crack foot ball and

base ball teams is the place that attracts the most attention.

O. S. U. has always stood well up among the other institutions of the state in regard to athletics. This has always been especially true in regard to baseball, and in the last few years it can be said of foot ball.

This fall promises to turn out the best foot ball team of which our University has ever been proud to boast.

The management for the season is excellent and the gentlemen in charge report the outlook very favorable. It is the intention of Manager Madden and Captain French that the team shall begin practice upon September 12, before school begins. This is a new feature of the game at this place, and we doubt not that it will prove successful. It has been tried at older colleges and the result has been good there, so why shouldn't it hold here?

If affairs turn out as is expected at present several old players from other teams will be here this fall to travel under the scarlet and gray. Taking everything into consideration we can prophecy a successful season on the grid-iron this fall.

People often ask the question: "How can we keep the boys on the farm?" and many are the answers, wise and otherwise, which they receive! That the daily life on many farms amounts to nothing less than drudging for the boys (and girls too) cannot be doubted. How often do we note the fact that the small boy is expected to run here and there, back and forth, from the field to the house and from the house to the barn, all day long and still be expected to be spry and lively enough to help around until bedtime after all of the men have stopped work? How often does the small boy work along in the field carrying sheaves or some such work, and when the time to rest comes, he must run for water for the men and still keep his end of the work right up with theirs? Is it any wonder that the boy tires of this kind of slavery? And

I have even known farmers to rouse their family out and get them stirred up in the dead of night, long before daylight; then sit around and wait until it is light enough to work outside. They get up early in this way "because it is healthy." Men of this type take few if any papers and magazines, use old fashioned farming machinery because they have no faith in the "new fangled notions," although their neighbors who use these improvements are successful farmers, and they are standing still or going the other way.

I often think of what a noted speaker and orator once said: "Let your children sleep. Don't drag them from their beds in the darkness of night. Do not compel them to associate all that is tiresome, irksome and dreadful with cultivating the soil. In this way you bring farming into disrepute. Treat your children with infinite kindness—treat them as equals. There is no happiness in a home not filled with love."

Let the farmer's home be a home for his children and not a place for them to stay and work. When the farmer boy lives in a home instead of at his father's house—when in the farmer's home shall peace, and happiness and love and joy reign and rule, then will the young men and young women learn to love the farm. Then shall the general standard of the agricultural population be raised.

TOWNSHEND LITERARY SOCIETY.

The students entering the University in the College of Agriculture and Domestic Science should see that they get started in the right direction. They should be sure to attend the first meeting of the Townshend Society. This Society meets in their room in the Horticultural Building on every (?) Friday evening. It is the largest and most progressive literary society in the University, and is distinctly of the College of Agriculture and Domestic Science, as far as membership. It is not a technical society, but a general college lit-

erary society, and the same training may be had here that is secured in any of the older societies.

The opening meeting will be held September 18, 1896. A full turn out is anticipated and we trust we shall not be disappointed.

After you see the manner in which the meetings are carried on perhaps you will wish to join the society. If so don't be backward, but brace up to some old member and tell him so in as few words as possible, and he will attend to the rest.

Having seen the Society from its beginning we are in a position to judge of its future prospects, and can say truly that they are exceedingly bright.

Let us continue the work of former years and honor the man whose name we bear.

OUR GRADUATES.

What they have been doing.

Many of the old students will be interested to know what has become of our seniors, the old leaders of last year.

Since graduation they have been engaged in different pursuits.

Mr. Crowner, until August the first, was engaged in conducting some experimental work upon the University farm. From the 1st of August he has been connected with the dairy of the Ohio Experiment Station at Wooster, O.

Mr. Hill, our graduate in horticulture and forestry, has spent the summer at his home in Northern Ohio in recuperating, with the aid of the lake breezes. We are not informed as to what he intends to follow in the future.

Mr. Pfarr, shortly after graduation, took his departure for the West. He has traveled over Iowa, Kansas, Missouri and several other states, and makes very favorable reports of the condition of the agricultural interests in the places which he visited. Mr. Pfarr has accepted a position at Mt. Pleasant, O., where he is to have charge of and operate a large creamery.

Mr. Rublen has been following his chosen vocation during the summer up-

on his farm in Union county. He has made us a few visits and reports everything lovely.

Mr. Rarick has spent most of his time since graduation at his home in Thorneville. During the coming year he intends to continue his studies in medicine at Starling Medical College.

Thus our classmates and leaders have put in their time since graduation. They have gone out into the world and are occupied and wrapped up in its operations. We will miss them, to be sure, in many ways. We will miss their company, their encouragement and their example, but we shall expect to hear from them often, and here we wish to say to them that a letter or a few lines will be gladly received at any time. This applies also to the ex-students and the alumni of former years. Drop us a line once in a while; let us know what you are doing that we may tell the rest of your old classmates. And to make your old remembrances more sound, support in every way possible the work of the Agricultural Student Union, and thus let yourselves be known, not only by the pleasant memories of days gone by, but by your good works at the present time.

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

The American Association for the Advancement of Science held its annual meeting at Buffalo, N. Y., in August. This Association is well known throughout the civilized world by its good work in furthering the advancement of science in all directions. The Association is divided into sections, each section having a special line of research for its object. Professor Wm. R. Lazenby, the secretary of the College of Agriculture and Domestic Science, is vice president of Section 1, which deals with social and economic sciences.

For the late meeting we received the following announcement:

BUFFALO MEETING, AUG., 1896.

Section I. Social and Economic Science.

William R. Lazenby, Columbus, Ohio,
Vice President; Richard O. Colburn,
Elizabeth, N. J., Secretary.

PRELIMINARY PROGRAM.

Monday, August 24.

The section met for organization immediately after the general session.

Monday, August 24—3:30 P. M.

Vice President's address, Horticulture and Health.

Tuesday, August 25.

1. The Competition of the Sexes and its Results (30 minutes), by Lawrence Irwell.
2. Fashion, a Study (10 minutes), by S. Edward Warren.
3. The Monetary Standard (— minutes), by W. H. Hale.
4. Citizenship, Its Privileges and Duties (— minutes), by Stillman F. Keeland.
5. In Inheritance for the Waifs (— minutes), by C. F. Taylor.

Wednesday, August 26.

6. The Proposed Sociological Institution (— minutes), by James A. Skilton.
7. What is true Money? (— minutes, contingent), by Edward Atkinson.
8. The Value of Social Sentiment (30 minutes), by Aaron B. Keeler.
9. The Wages Fund Heavy (20 minutes), by Aaron B. Keeler.

Other papers received were entered in the daily program published during the meeting.

Dean Hunt, of the College of Agriculture and Domestic Science, spent a part of the vacation in Illinois, recuperating on his father's farm. He reports a pleasant time.

Mr. Marion Imes has been confined for several weeks with typhoid fever. At present he is apparently about well, and we hope to see him up and about again by the time that the fall term opens.

THE NEW DEPARTMENT

Of Domestic Science—The Faculty of the College of Agriculture Adopts New Courses of Instruction.

The Board of Trustees at its recent meeting created a Department of Domestic Science and attached the Department to the College of Agriculture. The title of the College of Agriculture has, also, been changed to that of the College of Agriculture and Domestic Science. The President was authorized to employ a professor of Domestic Economy for the ensuing year.

The faculty of the College of Agriculture has adopted two courses in Domestic Science which will be offered next year, viz.: A four-year course and a two-year course. The first year of the four-year course consists of chemistry five hours per week through the year, botany five hours, zoology three hours and rhetoric two hours. In the second year the student has Domestic Science four hours, chemistry five hours, French or German four hours, and either a course in drawing, clay modelling, carpentry and wood carving five hours, or a course in horticulture and dairying five hours. In the third year is given Domestic Science four hours and French or German four hours, following work of previous year. Physiology and geology each occupy five hours during the first and second terms, while in the third term they are replaced by entomology and drawing, the latter consisting of a course in house designing. The required work of the fourth year is Domestic Science four hours and floriculture two hours per week through the year. In addition, the student may elect ten hours per week chosen from any of the courses given in any College of the University upon which the student is qualified to enter, except in the College of Law.

It will thus be seen that the course in Domestic Science is a course in language and science with the application of the latter to practical affairs of women.

The short course in Domestic Science is a two-year course. In the first year, chemistry is given five hours per week through the year. Mathematics and physiology, each five hours, are taught during the first and second terms, while in the third term they are replaced by botany and physical geography. In the second year, two courses in Domestic Science, each four hours per week, are required, and in addition, the student may elect seven hours per week from specified courses in the four-year course.

Young women in this course, as in the other courses of the University hereafter, will have physical training and lectures in hygiene in place of the cadet service for the young men.

The requirements for admission to the four-year course in Domestic Science are (besides the common branches) United States history, physical geography, English composition, algebra, plane geometry, physics, botany, and either civil government or general history.

The requirements for admission to the short course are the common branches and United States history. The completion of the first year of the short course enables the student to enter the first year of the four-year course.

This course of study is provided for young women who wish to fit themselves for the serious affairs of life, and, at the same time, it gives to women that training of mind and hand which will enable them with true womanly dignity and grace to perform those obligations which present social conditions demand.

On August 19, 1896, the Farmers' Union of Franklin county held a picnic upon the State University grounds. For the exercises of the day a temporary platform was erected near the spring, with the grassy bank for the accommodation of the audience. Farmers and their families began to gather in bright and early, and by the time set for the exercises to commence there was a large and creditable gathering. The exercises,

which consisted of addresses and remarks, began at 11 a. m.

The following program was very well rendered:

PROGRAM.

Address of welcome.....
President James H. Canfield
 Recitation.....Professor Leo Lunn
 Address.....Profit in Dairying
 Mr. Thomas Hoover.

DINNER.

Address.. What is Hurting the Farmer?
 Dr. W. I. Chamberlin.
 Recitation.....Prof. Leo Lunn
 AddressCattle Industry
 Senator E. B. Earnhart.
 Address President Schriner

ORANGE BLOSSOMS.

At Polo, Ill., the beautiful home of Mr. R. D. Woolsley was filled to overflowing on July 16, with a gay gathering to witness the marriage of his charming daughter, Miss Ola Caroline Woolsley to Professor William David Gibbs, of this University. The ceremony and wedding was a very pleasant affair. In the evening the newly wedded pair repaired to the station and left for Chicago, where they took a boat for the Great Lakes. About a month was spent on the waters of Lakes Michigan and Superior.

After September 1 Professor and Mrs. Gibbs will be at their home, 191 King avenue, Columbus, Ohio.

Miss Woolsley is a young lady of rare attainments. She is a graduate of University of Illinois of the class of '94, and held a fellowship in Latin the year following her graduation.

The groom has already won distinction and favor in his work and bids fair to become a shining luminary in his chosen vocation.

Of the bride, her natural sweetness of character, her charities and her own noble self too much cannot be said.

THE COLLEGE OF AGRICULTURE
AND DOMESTIC SCIENCE OF
THE OHIO STATE UNI-
VERSITY.

While probably no institution of learning has yet reached Ezra Cornell's definition* of what a university should be, (* "I would found an institution where any person can find instruction in any study."—Ezra Cornell.) the Ohio State University is planned on very broad lines, as shown by the fact that it is divided into six colleges as follows: Agriculture and Domestic Science; Art, Philosophy and Science; Engineering; Law; Pharmacy, and Veterinary Medicine.

The aim of the University is to give to the young men and young women of Ohio the largest possible opportunity for both general and special training to prepare them for life, and to touch, in a practical and helpful way, every interest of this state. The University has seventy instructors, thirty departments of study, nine large buildings devoted to instruction, and about one thousand students. The lands, buildings and equipment are estimated to be worth \$2,000,000.

While the University estate is a very fine one, consisting of 337 acres about equally divided between river bottom land and upland, the facilities of instruction in technical agriculture have been rather meagre. The recent decision of the Board of Trustees of the University to erect Townshend Hall at a cost of \$75,000 for the Departments of Agriculture and Agricultural Chemistry, will give to the University one of the finest buildings ever erected for the purpose in the country.

In the neighborhood of \$200,000 is to be expended within the coming year for these new buildings, viz., an agricultural building, a biological building and an armory and gymnasium.

The land grant act of 1862, under which the Ohio State University was established, made it the duty of such institution to teach certain branches of learning "in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." Using terms in a broad way, the work of the world can be divided into three classes, viz.: Agriculture, manufacturing and transportation. Of these, agriculture alone deals with living things.

The courses of study offered in the College of Agriculture, therefore, have for their basis chemistry and the biological sciences, thus enabling the ardent to grasp, as far as present knowledge will allow, the fundamental truths concerning life and living things. To these sciences are added the applied sciences and the strictly technical studies and, also, economics, languages, English and foreign, and other liberal studies "in order to promote the liberal and practical education" of those persons who intend to follow agricultural pursuits.

The scope of the College of Agriculture has recently been enlarged, but not materially changed, by the addition of the department of domestic science. Agriculture has for its object the production of the materials which feed and clothe mankind. Under the present social order the large majority of women have to deal in their practical affairs with these same material necessities and comforts. Chemistry and the biological sciences lie at the foundation of problems which woman meets daily, but of which her ignorance at present is so great that she usually fails to realize the disadvantages under which she labors.

The College of Agriculture and Domestic Science offers six courses of instruction:

I—The Four Year Courses.

There are three full collegiate courses. One is in agriculture, one in horticulture and forestry, and another is in domestic science. While these courses give

a thorough technical training in lines indicated by the courses, as well, as in the sciences underlying these arts, they afford an education and training fully as broad and liberal as that given by the other four year courses in the University. The scope of these courses is shown by the fact that instruction is given in the course of agriculture by the following departments: Agriculture, agricultural chemistry, botany, civil engineering, drawing, English and rhetoric, French, geology, German, history, horticulture, mathematics, military science and tactics, physics, physiology, shop-work, veterinary medicine, zoology and entomology. The fact cannot, perhaps, be too strongly enforced that it is not the purpose of this college to teach agriculture and domestic science only, both important in themselves, but "to promote the liberal and practical education" of persons who have to deal with certain agencies in order that these practical affairs may be intelligently and successfully managed.

II—The Two Year Courses.

There are two two-year courses, one in agriculture and the other in domestic science. The first, known as the short course in agriculture, includes horticulture, and the student may select, if he chooses, principally horticultural studies. This course contains as thorough instruction in agriculture, animal industry, dairying, horticulture (including fruit culture, vegetable gardening and floriculture), forestry, veterinary medicine, economic entomology and the sciences underlying these subjects, as the time will admit.

It is a thoroughly practical and popular course. About one-half of the students of the College of Agriculture are enrolled therein. Candidates are admitted to this course who present satisfactory evidence of preparation in grammar, geography, arithmetic and United States history. When candidates are over twenty-one years of age, preparation in these branches is assumed.

The first year of the short course is

preparatory to the first year of either of the four year courses. At the end of the first year of the short course, the student has three strings to his bow. He may complete the short course by taking the second year of the course, or he may become freshman in either of the full four-year courses. It is in this short course in agriculture that the Board of Trustees offers a free scholarship annually, to one student of each county of the State of Ohio. As this scholarship is good for two years, there may be two students from each county each year.

The short course in Domestic Science will bear the same relation to the four-year course in Domestic Science as the short course in agriculture does to the four-year courses in agriculture, and in horticulture and forestry.

III—Special Course in Dairying.

The special course in dairying is established to meet the wants of those who have neither the time nor means for the above extended courses. It is designed especially for those who are desirous of mastering the art of butter and cheese making or who wish to become fitted for the position of manager or superintendent of a creamery or cheese factory. In this course the greater part of the time is given to the laboratory or dairy room practice. This consists in the testing of milk as to purity and contents of butter fat; the use and care of centrifugal separators and other dairy devices; the making of butter and cheese by the most improved methods; in short, all the essential operations of the creamery, factory and home dairy management are repeatedly performed under the guidance and direction of competent instructors. The laboratory or dairy room practice is supplemented, however, by lectures and recitations upon the subject of breeding, feeding, selecting and judging of dairy stock; the disease of a cow; the chemistry of milk; the effect of bacteria and other agents upon milk and its products; the care of boilers and engines and similar subjects.

The most important feature of an institution of learning is the students. A saw-mill without logs to saw into lumber would be a failure. There were during the past year eighty-seven students in the College of Agriculture of the University. Of these five were graduate students, forty-one were in the four-year courses and thirty-four were in the short two-year course in agriculture. During the past year, five students have been elected to responsible positions in colleges or experiment stations; five have been employed in cheese factory, creamery or dairy, while a larger number have engaged in farming.

While the students of the College of Agriculture take their proper part in all college affairs, they also have their special lines of activity. The Townshend Society is an association of agricultural students with a membership of fifty, which holds weekly meetings for self-culture and to discuss agricultural and other topics. They also publish a monthly journal entitled "The Agricultural Student," devoted to their special interests, which is, indeed, a very creditable publication. The May issue contains a picture, biographical sketch and summary of the thesis of each of the five members of the graduating class from the College of Agriculture. There is, also, an association of students, ex-students and alumni of the College of Agriculture known as "The Agricultural Student Union." This Union has for its aim, among other things, the conduct of co-operative experiments. One hundred and fifty members are at present conducting over five hundred experiments.

The work of the University farm is done largely by students and there is a system of student management which is working well. Each class of live stock is in charge of a student chief or foreman who is responsible for the work of any other students which may be required. All are under the supervision of the assistant in agriculture, himself a graduate of the College of Agriculture of the University. An examination of the farm

pay roll for the year ending December, 1895, including the summer vacation, shows that a total of eighty-nine students performed more or less work during the year. One student, Mr. Martin Imes, earned over \$300, while four students earned between \$200 and \$300 each. Five earned between \$100 and \$200 and twelve others earned more than \$50 and less than \$100 each. Eight students earned between \$25 and \$50 each, while fifteen others earned between \$10 and \$25 each. The total amount paid by the farm for student labor during the year was \$3,858.77. In addition there were paid to students for work on the University campus \$871.92. A considerable amount was also paid to students for work done in the orchards, gardens and forcing houses.

The free scholarships constitute another great aid to the students in agriculture. Holders of scholarships are excused from all college dues. Many young men are able, through the aid of a scholarship and their own work on the farm, to make their way through the four-course, who could never have gained a college education without such aid. Many of the students who earn the most money by their labor are leaders in their classes and college affairs.

The State Board of Agriculture, as managers of the Ohio State Fair, have arranged the following programs on exhibition for each day and evening during the coming fair, August 31 to September 5. The aim has been to so distribute the features as to make each day and night of equal interest:

DAY EXHIBITIONS.

Tuesday, Sept. 1.

Music from the stands and pavilions.

Exhibitions in the live stock rings of thoroughbred horses, grade coaches, grade draft and saddle horses.

Polled Durham cattle, Red Polls and Devons.

Oxford Down and Hampshire Down sheep, Shropshires and South Downs.

Duroc or Jersey Red swine, Chester Whites, Essex, Suffolks, Yorkshires, etc.

Exhibition of poultry and water fowls.

On the speed track—2-year-old trot and pace and 3-year-old pacers.

Horseless vehicles, exhibitions and contests.

Complete exhibitions in all the various buildings and departments.

Wednesday.

Band concerts at the pavilion.

Music from all the band stands.

Exhibitions in the live stock rings of roadster horses, French coachers, Hackneys, French draft, Clydesdale, Shire and Morgans.

Shorthorn cattle, Black Polls, Herefords and the milk test.

Merino sheep, Delaine Merinos, French Merinos—Rambouillet and fat sheep.

Poland China and Berkshire swine.

Exhibition of poultry and water fowls.

Display and examination in all the buildings and departments.

In the speed ring—2:27 class trotting, 2:20 class pacing and 2:33 class trotting.

Horseless vehicles, exhibitions and speed contests.

Thursday.

Band concerts at the Central pavilion.

Band music from all the stands.

Exhibitions in the live stock rings of standard bred horses, French and German coachers, Cleveland Bays and Belgians.

Jersey cattle, Ayreshires and Guernseys.

Long wool sheep and sweepstakes on fine wools.

Sweepstakes on swine.

Complete display in all the exposition buildings and departments.

In the speed ring—2:27 class trotting, 2:30 class pacing and 2:18 class trotting.

Horseless vehicles.

Friday.

Band concerts at the pavilion.

Band music from all the stands.

Sweepstakes classes of horses.

Grand sweepstakes on cattle.

Sweepstakes classes of sheep.

Grand cavalcade in the horse ring of all the premium animals.

Display and exhibitions in all the buildings and departments.

In the speed ring—2:40 class trotting, free-for-all pacing, 3-year-old trot and special exhibitions and trials for record.

Horseless vehicles.

NIGHT EXHIBITIONS—BY ELECTRIC LIGHT.

Tuesday Night, Sept. 1.

Band concerts at the music pavilions

Electric light illuminations in all the exposition buildings.

Special display in the woman's building.

On the speed track—Running and hurdle races.

Special exhibition of saddle horses, leapers and high school horses.

Exhibition of horseless vehicles.

Wednesday Night.

Band concerts at the music pavilions.

Display in all the exposition buildings by electric light.

Grand special display of floral designs and cut flowers in the floral department.

On the speed track—Running races, novelty races and special features and attractions. Matched teams and fancy turnouts.

Special exhibition of horseless vehicles.

Thursday Night.

Band concerts at the music pavilions.

Displays in all the exposition buildings by electric light.

Grand special displays of floral designs and cut flowers in the floral department.

On the speed track—Running races, dashes and heats, with extraordinary special attractions.

Fancy single turnouts and driving by ladies.

Special exhibition of horseless vehicles.

Friday Night.

Band concerts at the music pavilions.

Special electric light illuminations, with displays in all the exposition buildings.

On the speed track—Running races, dashes and to harness, with great closing exhibitions of special features and novelties.

Pony turnouts and pony races.

Horseless vehicles.

FOOTBALL.

The schedule of the games for this season is not yet completed, but the following is definitely known:

The first game will be played with O. M. U. at home on October 3. Otterbein, Case, Wittenberg, O. W. U. and Kenyon will be played at home. The Thanksgiving game will be with our old rivals, Kenyon. The games abroad will be—Oberlin, Washington and Jefferson, University of Cincinnati, Adelbert and Purdue. On examination it will be seen that our schedule is made up of the best teams of the West, and a strong team will be necessary to hold up our end of the string. The old players expected back are French, captain; Calkins, Crecelius, Jack Dunlap, Thurman, Howard, Giessen, Nichols, Richt, DeLong, Hawkins and Titus. The new men who have signified their intention to play under our banner are: Sweetland to play full-back; House, of Lancaster (6 ft 5, weight 240 pounds); Dempsey, Otterbein end; Lloyd, Otterbein full-back; Captain Beacum, of Delaware, Teeter-Otterbein half-back, and a great many good men from the Columbus High School and from Ada. This is the best showing we have ever had for a strong team. Let us all help to make things pan out good and strong and place O. S. U. at the top of the heap on the gridiron.

NEW STUDENTS.

You Will be Interested in the Following.

The secretaries of Colleges are:

Agriculture—Prof. Lazenby, Horticultural Hall.

Arts and Philosophy—Prof. Bower, University Hall, room 17.

Engineering—Prof. Thomas, University Hall, room 10.

Pharmacy—Prof. Kauffman, Chemical Hall, first floor, west end.

Science—Prof. Bohannon, Hayes Hall, first floor, southwest room.

Veterinary Medicine—Prof. White, Veterinary Hospital.

Law—William F. Hunter, Dean.

GRADING SYSTEM.

The percentage system is not used in the University, but instead a series of marks, as follows:

M. Passed with merit.

K. Credit.

P. Passed.

C. Condition.

F. Failed.

I. (Red) condition removed.

X. (Red) condition changed to failure.

LITERARY SOCIETIES.

O. S. U. takes especial pride in the excellent work of her Literary Societies. Here it is that the student receives a thorough training in general literary work, parliamentary order, debating and extemporaneous speaking. No ambitious student can afford to miss such a thorough discipline.

Horton Literary Society—Founded 1874. Meets every Friday evening at 7:30 in Horton Hall. Motto: Per "Augusta ad Augusta." Colors: Cherry Red and Sky Blue. Yell: Rah, -Rah, Rah, H-O-R-T-O-N, Horton.

Alcyone Literary Society—Established 1874. Meets every Friday evening at 7:30 in Alcyone Hall. Motto: "Fabri, Fabricando Fimus." Colors: Old Gold and Gray.

Browning Literary Society—Organized 1882. A young ladies' society. Meetings every Friday at 3:30 p. m. in Browning Hall. Colors: Pink and White. Yell: Rip, Rip, Rah! Pink and White! Where is Browning? Out of Sight!

Townshend Literary Society—Organized 1892. Meetings every Friday evening at 7:30 in their room in the Horticultural Building. Composed of students of the College of Agriculture and Domestic Science. Colors: Old Gold and Olive Green.

Philharmonic Literary Society—Organized 1894. A young ladies' society. Meetings every Thursday at 3:30 p. m.

GENERAL ATHLETICS.

The history of athletics at O. S. U. records many brilliant triumphs. Our foot ball teams, base ball teams, tennis tournaments and Field Day contests have brought much glory to this institution. In 1892 we won the base ball pennant of Ohio, and for the last three years have held the tennis championship of the same state.

Athletics do much to advertise a college, and all students should give the teams their earnest support and help make them the best in Ohio. Be sure to attend all games and encourage the boys with a lusty yell.

ATHLETIC ASSOCIATION.

This association has control of the University Athletic Grounds and all athletic events. The annual Field Day is held in May. A membership fee of \$1 is charged, except to men who have played in match games.

Before the first foot ball game learn the college yell, get some college colors and carnations and then go to the game and help the team along.

YELL AND COLORS—COLLEGE.

Flower—Scarlet Carnation.

Colors—Scarlet and Gray.

Yell—Wahoo! Wahoo!

Rip, Zip, Bazoo.

I Yell, I Yell,

For O. S. U.

COMMERCIAL FERTILIZERS.

Their Effect Upon the Soils and Crops.

On traveling through the country and talking one question of general interest with the farmer, the use of commercial fertilizers is often brought up for discussion. At this day, when the use of these fertilizers is so well spread and often with such poor results, it is not to be wondered at that it should be a subject of the greatest interest to those who depend upon the products of the soil for their sustenance.

The state agricultural experiment stations and the institute speakers (not to take into account the agricultural papers which have treated the subject), have for years been employed in explaining the use of certain commercial fertilizers upon certain crops grown upon a certain kind of soil. Almost all, and perhaps every experiment station in existence has made this one of their major experiments—the effect of commercial fertilizers upon different crops.

The results obtained by the experiment stations are often very good, and show a very fair profit in every way from the use of these compounds. But the farmer will tell you, in the majority of cases that the use of manufactured fertilizers means disaster in the end.

Now, obviously, there is a disagreement somewhere. Either the farmer did not apply the right kind of fertilizer to his land, or else he was sold a bogus article. This latter premise is no doubt often the case. For, the average farmer, having no accurate and convenient way to determine the potency of the article, is often led by unscrupulous dealers to purchase a worthless fraud in place of a valuable plant food.

But, on the other hand, the first supposition may just as often be the case, and right here it might be well to state that scientists and prominent agriculturists are coming to recognize the fact that the effect of fertilizers upon the soil is not entirely chemical. The soil physi-

cists have proved conclusively that not only is the chemical composition of the soil altered by their use, but the mechanical composition also is changed by their addition. The texture may be changed, the hardness affected or the capillarity increased or decreased. It is plain to be seen that all of these might come about by the addition of these new compounds. And these mechanical conditions of the soil are fully as important to plant growth as the chemical composition. For what would the plant do in a soil rich in all the elements needed for assimilation, if the mechanical composition was such that it could not get a sufficient amount of water? There might be a wealth of food all about it and still the plant would die, because, on account of the insurmountable barrier, formed by the hard soil, it could not reach it. So much for the mechanical composition of the soil, and its importance.

Again, we often hear the practical farmer say that to use commercial fertilizers once means that you will be doomed to use them always, and in greater quantities as the years go by. Take for instance, he will say, this case: "I plant my wheat one year with fertilizer. This fertilizer of course furnishes an amount of plant food sufficient to furnish this crop. The next year I can plant the same field to the same crop, having fertilized the year before. But as this continues I notice that my crop begins to fail. What is the reason?" In nine cases out of ten, yes, ninety-nine out of a hundred, the reason can be brought out easily. The fertilizer that was put upon the field was not a complete fertilizer. Suppose that the fertilizer contained all of the elements needed for the crop except one, a so-called unimportant one. As the field is planted to the same crop year after year this "unimportant" element will begin failing and of course the crop will do the same as all elements, no matter how much they may vary in amount in the plant, are equally import-

ant, and if all but one are abundantly supplied, the crop will fail on account of the absence of this one.

Thus we can say that the theory of the use of commercial fertilizers is all right. But we must take into consideration the fact that each element is just as important to the plant as any other although all are not contained in equal amounts, and the fact that the effect upon the mechanical composition of the soil, as influenced by fertilizers, is very important.

VARIOUS MOTIVES FOR GARDENING.

We have noted the following by Professor C. S. Sargent and consider it worthy of reproduction:

"We have just received a letter from a valued correspondent in which he says that he cannot understand the insistence upon planning and planting for general effect. He delights in his garden, but his pleasure is not associated in any degree with the landscape as he understands it. He loves plants, he appreciates the beauty of flowers, he enjoys their companionship and he reads with interest everything that is said about new or old ones which any way broadens his knowledge of their habits and helps him to cultivate them more successfully. He finds abundant comfort in gardening of this kind, but he sees nothing to attract him in landscape-gardening. No doubt, this statement represents the innermost feeling of many people who take a genuine interest in horticulture, and it is often expressed to us in one way or another. With people of this taste and temperament the garden exists for its plants, and the plants are not grown for the sake of the garden. That is, a garden in this view is a place where a collection of plants is carefully attended and enjoyed for their individual beauty and other interesting qualities, and with no purpose of forming, in connection with the house, any picture which is to be studied and enjoyed as a whole. Perhaps the majority of all who are in-

terested in gardens sympathize with the view of our correspondent, and they find a real pleasure, and pleasure of a most refining and refreshing kind, in their practice. It is our belief, however, that they might do all this, and at the same time gain a new and ever-growing satisfaction if they gave thought to the general modeling and arrangement of the whole scene as well as to its individual details.

“No doubt the word ‘landscape’ is something misleading when the term landscape-gardening is applied to small areas, but, then, we have no phrase to take its place. In the design of a village plot we may have nothing to do with the material that was in Lowell’s mind when he said, ‘A real landscape never presents itself to us as a disjointed succession of isolated particulars, its lights, its shadows, its melting gradations of distance.’ In ordinary use, the word ‘landscape’ conveys an idea of some spaciousness—a foreground, a middle distance and a distance—but, nevertheless, is possible even in a limited space to carry out a scheme which as a whole makes a distinct and consistent appeal to the eye and to the imagination. Such a garden must embody and express some idea which the observer can feel and appreciate. It may be made a type of coziness or of simple homelike restfulness or of inviting hospitality or even of studied elegance, but to achieve such a result is not easy. Nevertheless, a moderate-sized house-scene may be a genuine work of art which displays the creative touch of genius. This only comes to pass when the true artist discovers the hidden poetry of the place, and knows how to handle and adjust all his material to give the theme its full and complete expression.

“Landscape-gardening of this type is much more than the arrangement of plants and trees so as to exhibit harmonies of form and color. It is possible to make beautiful and effective arrangements without attempting any such expression as we have alluded to, and yet

the arrangement of plants solely for the sake of their form and color may be truly artistic. It requires the same kind of skill which groups cut flowers into effective bouquets or arranges them into effective table decorations, or which creates a charming mosaic pavement out of bits of different-colored stone. No doubt, our correspondent who loves each plant as an individual, will understand that he can enjoy his Ascension Lilies and his Delphiniums just as thoroughly as he now does if they were planted together, so that each would heighten the beauty of the other, or he can appreciate in what exquisite harmony his white and yellow *Eschscholtzias* dwell together; or how the attractiveness of his white and scarlet Poppies is emphasized when under a glowing sun they are seen against a mass of dark foliage. Whatever name is given to the art which achieves such pleasing combinations it certainly is worth study, and it brings with it a high order of pleasure. Without it there can be good formal arrangements in connection with architecture, no success in regular planting which ought to be an essential feature in many small and geometrical areas. This kind of art differs, perhaps, from what we generally know as landscape art, in that it appeals more directly to the aesthetic sense and can hardly be said to move the emotions.

Now, the man who loves his plants for their own sake may still arrange them so as to make an effective display of form and color, or he may subordinate them to the creation of landscape picture which expresses some idea, some inner meaning, but no one can justly find fault with him if he goes on as he is now doing and enjoys his plants simply for what each one is to him. His garden will be a constantly increasing solace and refreshment and he will take a keen delight in it. It is gardeners of this sort who make a personal acquaintance with their plants and by an intimate study of them discover all their secrets, their habits and even their whims. They find something new every morning, something to invite

study or admiration. They are the men who become our ablest instructors in all points of culture. Mr. Olmstead has somewhere called this art specimen-gardening, to distinguish it from parterre-gardening and landscape-gardening proper.

SUGGESTIONS FOR THE FARM.

When pasture is short, as it usually is with many farmers during July and August, the question arises, What shall be fed the cows that the milk production will not be materially decreased, because of the withering and drying up of the grass?

It is a sad mistake that so many farmers feed their cows nothing in connection with the short, dried-up grass of the pasture field. Now it is a fact, and needs no argument, that we will get from the cow only what she uses as food. We never get corn from threshing wheat straw, and we never will get a good flow of milk unless we first feed the cow something to produce that milk, and during the dry, hot summer the pasture field, ordinarily, will not furnish the succulence and food necessary for this milk production; it is, therefore, a good practice and almost necessary in a season like last summer to provide some sort of soiling crop to feed the cows in connection with the pasture crop.

At the University farm it is our practice to feed green rye early in the season; then, as soon as we are able, we sow about one-eighth of an acre to common field peas and oats mixed as seed. The oats afford support for the pea vines and in a few weeks we have a good crop of excellent milk-producing food. At the time of pea-oat sowing we plant a patch of early corn that will furnish green food for the cows when the peas and oats have been used up. Our method is to mix two bushels of oats and three bushels of peas and sow this amount on one acre of land, and as for the corn, we plant in drills, one grain every three inches, the rows thirty inches apart.

It is surprising what a crop of green forage can thus be produced from a single acre. This corn is fed from about July 1 and continued until ensilage time. Every farmer could easily and readily plant a small patch of corn to use for summer feed and would be abundantly repaid in the increased income from feeding by this system or some other green crop.

BREEDING HOGS FOR PORK.

The basis of all hog breeding is pork production, and the chief item is to produce a hog that will make the most profitable feeder. Scrub stock are not meat producers. They are not economic eaters. Actual experiments have proved that it requires more food to produce a pound of meat from the scrub than from first-class stock. Not necessarily fancy stock from the breeder's standpoint, but well-bred hogs—those whose qualities and ancestors have shown high qualities as feeders. A first-class boar, both in breeding and in individuality, is none too good for breeding meat hogs, and if bred to high-grade sows that are properly fed and managed, will always pay for his purchase price and a handsome profit besides.

It is beyond comprehension why so many of our farmers will persist in breeding scrub boars to scrub sows only a few stages removed from the razor-back, when good boars can be purchased for \$15 or \$25. It is not so much more hogs that we want as better hogs, and a better system of feeding.

The most expensive combination yet devised for pork production is scrub stock, which stands for little feed and no care.

CULTIVATION OF GROWING CROPS.

It is a good practice to cultivate growing crops before they are planted. Get the soil in good condition, so that the seed has a perfect seed bed, and then even before the plant appears we find it good policy to go over with a fine harrow to destroy the young weeds that al-

ways get the best start, because they start right from the top of the ground, whereas the seed planted is an inch, more or less, below the surface. This harrowing usually leaves the ground in fine condition.

Keeping down the weeds is the all-important thing with any growing crop. The weeds not only rob the growing plant of the needed fertility of most soils, but use a large amount of water which is so necessary to the plant during the warm summer months.

It is not a question as to how often we cultivate, but how thorough. The essential things are the destruction of the weeds and the breaking of the crust that forms after rain.

In the cultivation of corn on the University farm we find it necessary to go over with the hoe; and we are no respecter of weeds; all are cut down and then the corn has the full benefit of all the available fertility, the air and sunshine and all the moisture in the soil.

FODDER CROPS.

For the production of milk it should be the aim to produce those crops which furnish the largest amounts of the most valuable food materials in the most palatable forms possible. Opinions differ as to the best time for cutting hay so as to secure the nutriment in the most palatable and most digestible forms. It is true that if a fodder is cut on the green side a smaller yield is obtained, but this smaller yield is of exceptionally good quality. For both growth and milk production the constituents known in fodder as the protein compounds are of most importance. These protein compounds are also called the vital nutriment, on account of their importance for sustaining life. Clover, rape, peas, oat hay and flax hay all owe their high value to the large amount of protein which they contain. The protein in all plants is produced before the bulk of starch, sugar and fat are formed, hence, when hay is cut on the green side, all of the protein is there, but not all the starch, sugar

and fat, because these compounds are mainly produced in the last stages of plant growth.

MILLET.

Millet is a native of a warm country and needs a warm soil to insure its best development. The soil should also be moderately fertile, of a gravelly, loamy condition. The seed should not be sown earlier than the first of June, but should be sown in a ground well plowed and harrowed. It is a mistake to think that the ground need not be in as good condition as wheat ground—it should be in as good or better. The ground should be thoroughly cultivated and harrowed and entirely free from clods or stones. The best results have been obtained by sowing three pecks of seed per acre for a forage crop, and where seed is desired not quite so much, one-half bushel being sufficient.

The stalk is not so coarse and woody when sown thickly, and consequently makes better hay. The seed is best sown broadcast and harrowed in with a light harrow. A good tool for this is the Gould harrow, a simple constructed tool made in the form of a triangle, of light wood, and driven full of six-inch spikes. This is also very serviceable in destroying the weeds when the corn is just appearing from the ground.

The best time for cutting is when the blossom is disappearing; it will be harder to cure at this age, but it will make better hay. After being left to dry it should be tedded a couple of times and then put in cocks and left until cured out. This may require three or four days, depending, of course, upon the weather. It then can be put in mow for use as feed. Like clover, if it is left to cure on the ground, much will be lost by the breaking off of the leaves. It is a good feed, especially for cattle, and we have found it an excellent food for horses if cut before the seeds have developed and properly cured before putting in the mow.

RAISE CLOVER.

One of the greatest aids to the farmer in increasing the profitableness of his farm is the raising of clover.

As a fertilizer for the land it is one of the best, as a stock and dairy food it is unexcelled. It is a good pasturage and also makes the best of manure. All things considered, clover is one of the best and most profitable crops on the farm, and you cannot get too much of it. We are years away from overproduction of soil fertility. What too many farmers have is underproduction of available plant food.

THE CHEERFUL SIDE OF FARMING.

Lack of demand for farm products and very low prices are a matter of concern to farmers. Financial prosperity seems to be getting wholly beyond our grasp. It exasperates me to be told that farming is all right, and only the farmer is wrong—that he is out of joint with modern and progressive business methods, and that those that get into line are doing well. Any sensible man who cares to study the question knows that prices of most farm products are down too near actual cost of production on farms east of the Mississippi to permit any energetic man to be reasonably well satisfied with the financial side of farming. It is a good thing to recognize the situation, as we are thus led to intelligent study of causes and prepared for intelligent action. As citizens we have much to do with creating the conditions under which we labor, whether we fully realize the fact or not, and it is the duty of every one not to gloss things over, but to see and tell things just as they are, so far as he may be able.

While holding this view strongly, I am sure that some of us burden ourselves unduly with the depressing features of our business, and fail to appreciate those things that go, today, to make farm life desirable. After facing the obstacles intelligently, and after doing all we can by word and vote to re-

move those depressing influences that are removable by the people, this darker side of farming should be kept out of our daily thoughts and lives as much as possible, and we should be just to ourselves and our occupation by recognizing its desirable features instead of ignoring them as much as we are apt to do when some things get out of joint. It is business to see the obstacles, but it is not business to carry a magnified "view" of them around with us in our daily lives, destroying our cheerfulness, hiding very much that is pleasant, and tending to make others think that we are sorry we were given a chance to live on this earth. Farming, right now, compares very favorably with many other occupations, and thousands who would swap their business for some other would clamor to swap back if the exchange were made.

SOME OF OUR ADVANTAGES.

I do not care to repeat what is usually said about the advantages of farm life. These things have become trite. We realize, at least in part, what it is worth to a man to be his own master, planning his own work and executing his plans; to have a degree of liberty, not bound to be an animate machine for another man a fixed number of hours every working day in the year; to have a good home with wholesome air; water and food, and no well-nigh unbearable crowding by neighbors; all these things have been often discussed, and should be ever fresh in mind. But, at this time, there is more than usual reason for choosing to remain content with farming. Our towns and cities are feeling more deeply year by year the failure of country folk to buy freely on account of hard times, and I have never before seen such extraordinary exertion on the part of manufacturers and merchants to keep their sales from falling off to the point that they would have to close their doors. Some have given up and others must, because the people are not able to buy freely. While many workmen are out of employment, more must join their

ranks. Capitalist and laborer are alike facing a future no brighter than that immediately before us.

In such times the advantage is with the farmer, if he is not deeply in debt. He can keep close shore, while the big manufacturer or merchant cannot. He can keep his job, which is safe for bread and meat and fruit, even if it pays little else, while the city worker is not sure of his chance to work. It is true that, as modern farming is carried on upon large farms, the investment on production of crops is hazardous when prices are very low, but I have in mind the very large number of farmers who pay out little money for labor, and whose capital, if invested in bonds or notes, would be sufficient to bring in a considerable income. They can make surer of a living than town people of equal means. Only the small capitalist whose capital is threatened, or the working man whose employer shuts down his factory can fully appreciate the blessing of an assured living, however humble, for those dependent upon him. Owners of small farms are sure of this, when farm plans do not call for much hiring. Daily labor for the owner and his family can be found, even if the reward seems small, and at the worst the reward is abundant good food, a healthy home, liberty of action and freedom from much worry.

STICK TO FARMING.

The fact that towns and cities are feeling the effect of hard times, and that many town people are having a harder struggle than formerly, does not make our lot better, but it does lead us to see that, comparatively speaking, our lot is not undesirable. Viewing the matter broadly, there is no reason for desiring to leave the farm, and if, in the future, more prosperity is to come to our towns and cities, we may rest assured that we will secure it first, as it is our surplus money that, in great measure, makes business good in centers of population.

So far as we know we shall pass

through life on this earth only once, and we want to get the best out of it while here. We shall fail unless we can see the good things that surround us, and that really outweigh the bad two to one. Tough as times are, the farmer, today, stands on surer ground to extract solid comfort out of this life than the average resident of a big city. His reasons for cheerfulness are greater, and they are good, substantial reasons.

—Alva Agee in National Stockman.
Gallia County, O.

NOTES.

Mr. Carl J. Miller, junior in the course in agriculture last year, and who played on the foot ball team, was unable to finish his year in college on account of severe illness of typhoid fever, will return this year and take up same work, graduating one year later. Mr. Miller is a well-known and popular student, and every one in the University will have a glad welcome for him on his return.

Mr. Philip L. Pfarr, of the recent graduating class, after spending the summer in Missouri and Iowa, returned to Ohio to take charge of the Mt. Pleasant Creamery. Mr. Pfarr is a very able student and will give the best of satisfaction in the work in which he is employed. During his junior year in college he completed the course in dairying and during the past year took up special work in this. The Mt. Pleasant Creamery company was very fortunate in securing such an able young man.

Mr. F. L. Landacre, instructor in zoology, has been elected to the chair of embryology in the Ohio Medical University. But while he holds a full professorship at O. M. U., he will still continue his connection with his alma mater. Mr. Landacre is to be congratulated upon his success in receiving this appointment, and we doubt not that he will do himself credit in his new capacity, as he is a close student and a thorough master of his subject.

Another link has lately been added to the long list of publications which have

the Capital City as their home, and this one is of especial interest to us, as students, as it is the representative of a sister institution. The "Phagocyte" appears this month for the first time. It is a monthly publication, of the magazine form, devoted to the interests of the Ohio Medical University. In assuming the editing and management of the paper thus far, Mr. S. K. Carson has shown himself a thoroughly able and competent personage, and we wish him and his enterprise all success in the future.

Our business manager, Mr. C. W. Burkett, has received the appointment of editor of the agricultural department of the "Ohio State Journal." This department of the "Journal" has become quite a prominent one within the last year, and in shouldering this new burden Mr. Burkett has no small task before him. But we know it to be a fact that the work will not suffer for want of attention, as its editor is one schooled by years of experience, and his work in his department thus far shows up very creditably indeed.

HOW PRIZE CHEESE IS MADE.

"The cheese which took the first prize at the South Dakota State fair, held at Sioux Falls, in September last, was made," says H. B. Booth of Canning, "as we aim to make all of our cheese, from first class material. This we aim to get by having our patrons handle their cows properly, giving them pure food and water, driving to and from pasture so as not to worry or overheat, using care not to excite the cow while milking, and seeing to it that no dirt from the cow or barn finds its way into the milk pail. If these rules are observed strictly the result will be that a good quality of milk to commence the manufacture with is secured.

"While thus far all may be well, the favorable conditions may be spoiled either by negligence or ignorance of either the patron or the cheese maker. If the patron should place this milk, which has come from properly handled and milked

cows, into cans which are not thoroughly cleansed, so as to remove all acids, or should not aerate and coll the milk down to about 50 degrees, the result may be sour or tainted milk. Such milk cannot be manufactured into a prize cheese by the best expert. I have heard some cheese makers claim that they could make cheese out of sour or tainted milk; so can butter be made from sour, rotten cream. While this is true, so far as manufacture is concerned, it is not true that it will be a prize article in either case.

"If the manufacturer fails to detect taint or the souring in milk when it is delivered at the factory, or if he does detect it and has not the sand to send it back, he is certainly making a mistake and one that he will feel like licking himself or his patrons for before the cheese made from such milk gets on the market.

"I have not much to offer from this point on the curing process. I used the best salt I could obtain and used full milk, no part of the cream being taken out. I heated to 84 degrees before adding the rennet and cooked the curd to 98 degrees to 100 degrees, according to the temperature. I handled the curd by the granular process. My curing room is made so as to exclude wind. When the temperature of the room falls below 70 degrees I use a fire to raise to 70 degrees.

"If such cheese is held after six days old, place it in a dry cellar during July and August."—Farm, Field and Fireside.

DETASSELING AND ROOT-PRUNING CORN.

Horticulturists have long held the theory that if the wood growth of the plant is checked the strength of the plant will be directed to the formation of fruit or seed. This is recognized as Nature's effort to protect the species. On this hint some experimenters have inferred that if the growth of the corn plant was checked by the mutilation of the roots or removal of the top or tassel the energy

of the plant would be directed to the formation of seed.

Dr. Sturtevant, originator of Wau-shakenn pedigreed corn, was the most active experimenter on these lines. His experiments at his farm in Massachusetts and later at Geneva, N. Y., led him to advocate root-pruning of corn as a means of increasing the yield of grain. At Cornell the experiments in detasseling corn the first two years favored the practice, but the third year little or no benefit followed. In Nebraska smaller yields followed detasseling. Like result were noted in Maryland. In Illinois two years' tests did not encourage the practice. In Kansas the detasseled corn showed a slight increase in yield. There have been other experiments both in detasseling and root-pruning, but as yet we have found nothing to show that either practice has enough in it to commend itself to the corn-grower. On the other hand we have the earnest advocates of shallow and level culture of corn who claim that any mutilation of corn roots after the first plowing or cultivating is decidedly injurious to the corn crop. We suspect that there is a shadow of truth in the claims of both.

In seasons when the soil moisture is deficient any manipulation of the soil that tends to lessen the supply of moisture cannot be advocated as a means of increasing the yield. On the other hand in soil that is rich in nitrogenous matter and has an abundant supply of moisture along with a favorable temperature corn tends to abnormally rank growth and ears form as well as mature later. If ever root-pruning would be an advantage it would be expected to follow in a season and in soils that lead to the production of a strong growth of stalk and leaf. The season and soil are factors of such controlling influence that we would place little confidence in experiments in either detasseling or root-pruning that did not give first consideration to those points. During the past three seasons we have had a shortage of moisture and reckless and destructive root-pruning by

grubs, corn-root worms and wire worms until corn growers are delighted this season to have enough moisture to give their corn a richness of color and vigor of growth that give promise of a good crop, both of ears and fodder.—Breeder's Gazette.

Prof. Wm. R. Lazenby, secretary of the College of Agriculture and Domestic Science, returned from Buffalo on August 30, where he had been attending the annual meeting of the American Association for the Advancement of Science. The professor reports a very enjoyable and profitable meeting. Among others who attended the meeting from O. S. U. were Professors Orton, Lazenby, Weber, Kellerman, Thomas, Kellicott and Lord.

New students should provide themselves with college buttons or penants. Also get two or three yards of scarlet and gray and learn the college yell. Bring your colors and yells to the football games and let everybody know you have them.

If you have ever played football or want to begin, hand your name to Captain Ed. French or Manager Mad-den at the earliest convenience. The team will begin practice on September 19.

A country schoolmistress with a vein of humor and much experience, says this is the way to parse the word "kiss":

"Kiss is a noun, though generally used as a conjunction. It is never declined. It is more common than proper. It is not very singular and is generally used in the plural number and it agrees with me."—[Exchange.

The University of Virginia is to rebuild the buildings recently destroyed by fire. It is estimated that this will cost the University \$260,000.